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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/647,814

08/25/2003

Cheng Chung Wang

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EXAMINER

FREAY, CHARLES GRANT

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

10/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/647,814	Applicant(s) WANG, CHENG CHUNG	
	Examiner Charles G. Freay	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment and arguments of August 25, 2009. In making the below rejections the examiner has considered and addressed each of the applicant's arguments.

Claim Objections

Claims 7 and 8 are objected to because of the following informalities: by the current amendment claims 7 and 8 are duplicates of one another. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 and 5 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Adams, III (USPN 4,862,533).

Adams discloses an inflatable product 10 having an inflatable body 36, a socket (shown in Figs. 9 and 10), an electric pump (124, see col. 4 lines 47-53) having a body (100, 120, 122, 124) partially located within the socket, a connector 128 and a switch 130.

Claims 2 and 5 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Owen et al (USPN 4,678,014).

Owen et al disclose an inflatable product (shown in Fig. 1) having an inflatable body M, a socket T built in the inflatable body, an electric pump (10, shown in Figs. 5 and 6) having a body (26, 144, 150, 149) partially located within the socket (see Figs. 1 and 8), a connector (shown in Fig. 1) and a switch (15). The pump outlet is connected with the inflatable body.

Claims 2, 5, 7 and 8 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chaffee (USPN 6,237,653).

Chaffee discloses an inflatable product having an inflatable body 28, a socket 26, an electric pump 100 having a body 1,18, 20 partially located within the socket (see Fig. 5), and a switch 5.

Claims 2 and 5 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rey (USPN 5,503,618).

Rey discloses an inflatable product 2 having an inflatable body 12, a socket 36, an electric pump 18 having a body (44 and inherent) partially located within the socket, a connector 60 and a switch 48.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over either of Adams, III, Owen et al, Chaffee or Rey.

As set forth above each of Adams, III, Owen et al, Chaffee and Rey disclose an inflatable product having an electric pump and inflatable body as claimed. The references do not disclose that the switch has a water proof layer covering the switch. The examiner gives official notice that waterproof layers covering a switch are well known. At the time of the invention it would have been obvious to one of ordinary skill in the art to provide such a waterproof arrangement to protect the electrical components of each of the Adams, III, Owen et al, Chaffee and Rey pumps from damage.

The examiner notes that the applicant has not challenged the examiner taking of official notice above. This is taken as an admission that waterproof layers covering a switch are well known.

Response to Arguments

Applicant's arguments filed August 25, 2009 have been fully considered but they are not persuasive.

The applicant makes a number of arguments relating to the applicant's interpretation that the language "an electric pump, including a pump body and an air outlet" means that the pump body and the air outlet are separate and distinct parts. The applicant notes that no definition has been given in the specification and that therefore the ordinary and customary meaning of the term applies. The applicant sets forth that this meaning would be that the term "pump body" means "the main part of the pump". The examiner agrees.

The applicant first argues that the claim language makes clear that the pump body and the air outlet are separate. The examiner respectfully disagrees. The applicant argues that the language "a pump body and an air outlet" clearly sets forth separate subparts. The examiner disagrees and sets forth that this is merely a conclusion set forth by the applicant. The examiner argues that a pump body can and often does define the outlet and include it. Therefore these parts or features are not necessarily separate and distinct as argued by the applicant. In fact the examiner finds that in the applicants own drawings the outlet is part of and defined by the pump body or the main part of the pump. The applicant reproduces his Fig. 8B in the argument section and states that the outlet 425 is on a separate part of the housing 42 in the figure. The applicant argues that the pump body is only the central wall 42 in the figure and that the outlet is on a separate part of the housing. The examiner disagrees with the applicant's argument that only the outer wall 42 is the pump body. In fact the whole outer wall in Fig. 8B is the pump body, including that portion defining the outlet. The examiner feels a better figure to understand the proper interpretation of the claim language is Fig. 8A

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where the whole center section 42 including the end wall defining the outlet 425 is part of the pump body. The examiner notes that elements such as 600 and 700 in the figure would be separate and distinct elements but that the outlet is not separate and distinct from the pump body.

The examiner notes that when applying prior art the broadest reasonable interpretation of the claim language must be applied. The applicant's restrictive interpretation of the limitation as only interpreting certain surfaces of the pump outer housing as being part of the pump body does not agree with this broadest reasonable interpretation and is not found persuasive. The applicant also argues that because the claim only mentions that the pump body is wholly or partially located within the socket, and does not mention any other part, this is further evidence that the pump body and the pump outlet are separate. This is again a mere conclusion by the applicant and is not found persuasive. The scope of the claim allows for the pump body to be within the socket and also have an air outlet which is either part of or separate from the pump body and within or outside of the socket. The mentioning of the pump body alone within the socket provides no limitation on the separateness or distinctness of the pump body and the air outlet.

Secondly the applicant argues that the dictionary definitions of the term body would define the term pump body as "a main part". As set forth above the examiner agrees with this definition. The examiner notes however that the applicant is taking a more restrictive view of what a "main part" of a pump is throughout his arguments.

The applicant also argues that the specification draws a straight forward distinction between the pump body and the outlet. In response to this argument the examiner references the above response to the first argument and again respectfully disagrees with the applicant's argument that only the outer wall 42 is the pump body. In fact the whole outer wall in Fig. 8B is the pump body, including that portion defining the outlet. The examiner feels a better figure to understand the proper interpretation of the claim language is Fig. 8A where the whole center section 42 including the end wall defining the outlet 425 is part of the pump body.

The applicant then makes arguments with respect to the prosecution history arguing first that Examiner Solak's remarks in the interview summary (7/1003) of the 09/738331 application the examiner made reference to the pump body and a discharge nozzle. The applicant ties this statement to the Feldman reference. The examiner notes that the intent of this statement is not at all clear. Firstly, the Feldman reference is not mentioned at all in the interview summary and secondly it is noted that the term discharge nozzle is not set forth in the claims of that application. The current examiner interprets such a statement to mean that with regards to Feldman the nozzle 38, as shown in Fig. 3 of the Feldman reference, is a separate element. With regards to Chaffee the applicant notes that in the interview summary the examiner stated: "even if Chaffee's pump had internal threads, the pump body would not be inside the socket". From this the applicant comes to the conclusion that the protrusion air outlet mouth region 28 is not part of the pump body. **This conclusion is exactly the opposite of**

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what can be concluded from the quoted statement. [Emphasis added.] By clearly stating that “even if Chaffee’s pump had internal threads, the pump body would not be inside the socket” the examiner has concluded that the air outlet port (defined inside of 28) is part of the pump body. As clearly shown by Fig. 2 and also Fig. 3 of Chafee the socket is the lower recessed portion 33 shown in the figures and is connected to another piece referred to as a cover 202, 39. The pump body is connected to this piece wholly outside of the socket. Thus the examiner’s statement could equally have been that even if the pump body at 28 had internal threads, the pump body would not be inside the socket.

With respect to Adams the applicant argues that the element 124 is a motor and cannot be considered a pump. The applicant also argues that Adams describes the entire series of combined structural elements 122, 120, 100, 44 and 124 as the pump means and therefore makes the conclusion that the examiner is tied to the Adams definitions of these elements for comparison to the scope of the claims in the present application. With respect to the element 124 only being a motor the applicant is wrong. Close inspection of Adams shows that at col. 4 lines 47-48 Adams states that “motor means 124 suck in air”. This makes clear that the motor means includes and is an electric motor driven pump.

With regards to the argument that it is improper for the examiner to interpret the elements, i.e. a pump body, in a manner different than what Adams describes in setting forth the description of his invention the examiner disagrees. The examiner notes that

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every applicant for a patent is allowed to be his own lexicographer when describing his invention. It does not mean that once patented the wording and terms used in the patents description must be strictly applied against the terms used in another application. The examiner also takes this position with regards to the applicant's argument that since Adams referred to element 44 as part of the "pump means" it precludes anyone ever from interpreting the elements 44 and 60 as being a socket. The disclosure of Adams is clear and easily understood and the examiner's interpretation of this teaching as it applies to the limitations of the current claims is further clear. With regards to the term socket this term is commonly understood in the art and from the reference to Figs. 9 and 10 one of ordinary skill would understand the socket is elements 42, 44 and 60 at least and that element 100,120 could alternately be considered part of the pump or part of the socket. The examiner further did not state that the pump body is a subset of the electric pump as set forth by the applicant. This is made clear by the statement in the rejection that there is "an electric pump (124, col. 4 lines 47-53) *having a pump body (100, 120, 122 124) partially located within the socket*". The examiner made reference to 124 and col. 4 to show that the pump was electrically driven. With respect to the argument that an outlet has not been identified the examiner notes that every pump inherently has an outlet. The outlet or fluid path is clearly shown in Fig. 13 of Adams at the right end of the structure. Clearly the openings define a fluid path and the term "outlet" depends upon what the reference frame is for in and out (such as either the pump or the inflatable product). The claim has not defined or limited this interpretation.

With regards to the Owen reference the applicant notes that Owen describes the element 149 as a connector portion of nozzle 144. The applicant further argues that since portion 149 is part of element 144 it is not part of the pump body. The applicant again refers to the argument that the pump body and the pump outlet must be separate and distinct and now further adds that the main part does not encompass a protruding air outlet. The examiner again repeats his arguments set forth above with regards to the similar arguments made in Feldman. The examiner takes the position that the applicant is making too limited of a reading of the scope of the term “pump body” and/or “main part”. The broadest reasonable interpretation of this term allows the entire outer structure shown in Fig. 5 including both elements 44 and 26 to be referred to as the pump body. Similarly, the broadest reasonable interpretation of this term allows the entire outer structure shown in Fig. 6 including both elements 144 and 26 to be referred to as the pump body. The examiner again makes the argument that interpretation of the Owen reference is not limited to the lexicography and terminology used by Owen in describing that invention. Rather it is the entire disclosure which one of ordinary skill in the art would understand from the reference that is used in determining the teachings of the Owen reference. The examiner also notes that the claim limitation “an electric pump, including a pump body and an air outlet” does not somehow set forth that the pump body specifically not encompass a protruding air outlet. The claim language places no such limitation on the scope of the claims. With regards to the outlet not specifically being identified the examiner again notes that a pump inherently has an outlet. Either of

the ends of the pump, such as at 149' or at the opposite end of the canister 26, could be considered an air outlet. Clearly the openings define a fluid path and the term "outlet" depends upon what the reference frame is for in and out (such as either the pump or the inflatable product). The claim has not defined or limited this interpretation.

With regards to the Chaffee reference applicant argues that an outlet has not been identified and that the examiner gives no reason or basis for saying the entire housing is the "pump body". The examiner again refers to the arguments set forth above relating to the similar arguments in Adams and Owen. The examiner asserts that the proper and broadest reasonable interpretation of the term "pump body" allows the entire outer housing as shown in Chaffee to be described as the "pump body". The applicant makes conclusive statements such as stating that the portions 18 and 20 "are clearly not components of the main part of the pump". There is no basis for this statement and the argument that the parts 18 and 20 are only "tiny portions" when compared to the rest of the pump does not change the fact that this tiny portion partially places the pump body within the socket. The examiner also notes that the applicant has not been able to clearly identify the pump body under his interpretation of the claim limitation with respect to Chaffee. Once again, the examiner notes that a pump inherently has an outlet. Either of the openings or fluid paths (18 or 10) of the pump could be considered an air outlet. Clearly the openings define a fluid path and the term "outlet" depends upon what the reference frame is for in and out (such as either the pump or the inflatable product). The claim has not defined or limited this interpretation.

With regards to the Rey reference the applicant makes the argument that an outlet has not been identified, that the specification limits the pump to either bringing air from the outside to the inside of the inflatable product or from the inside to the outside, and that an “air outlet” has not been identified. The examiner notes that the connection from the pump to the pipe 30 would represent the outlet. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the specification limits the pump to either bringing air from the outside to the inside of the inflatable product or from the inside to the outside,) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner additionally notes that the above noted connection between the pump and the pipe 30 is an outlet and that this can clearly be an “air” outlet. The claims do not positively state that the fluid being pumped is air and thus the invention has not been limited to pumping such a fluid.

With regards to the double patenting rejection the examiner notes that the abandonment of 10/450,690 has resulted in the withdrawal of this rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles G Freay/
Primary Examiner
Art Unit 3746

CGF
October 22, 2009